



NREL

National Renewable Energy Laboratory
Innovation for Our Energy Future

Alternative Compliance Program 10 CFR Part 490

Ted Sears

**National Conference of State Fleet
Administrators**

**22nd Annual Conference and Trade Show
Long Beach, California**

October 1, 2008

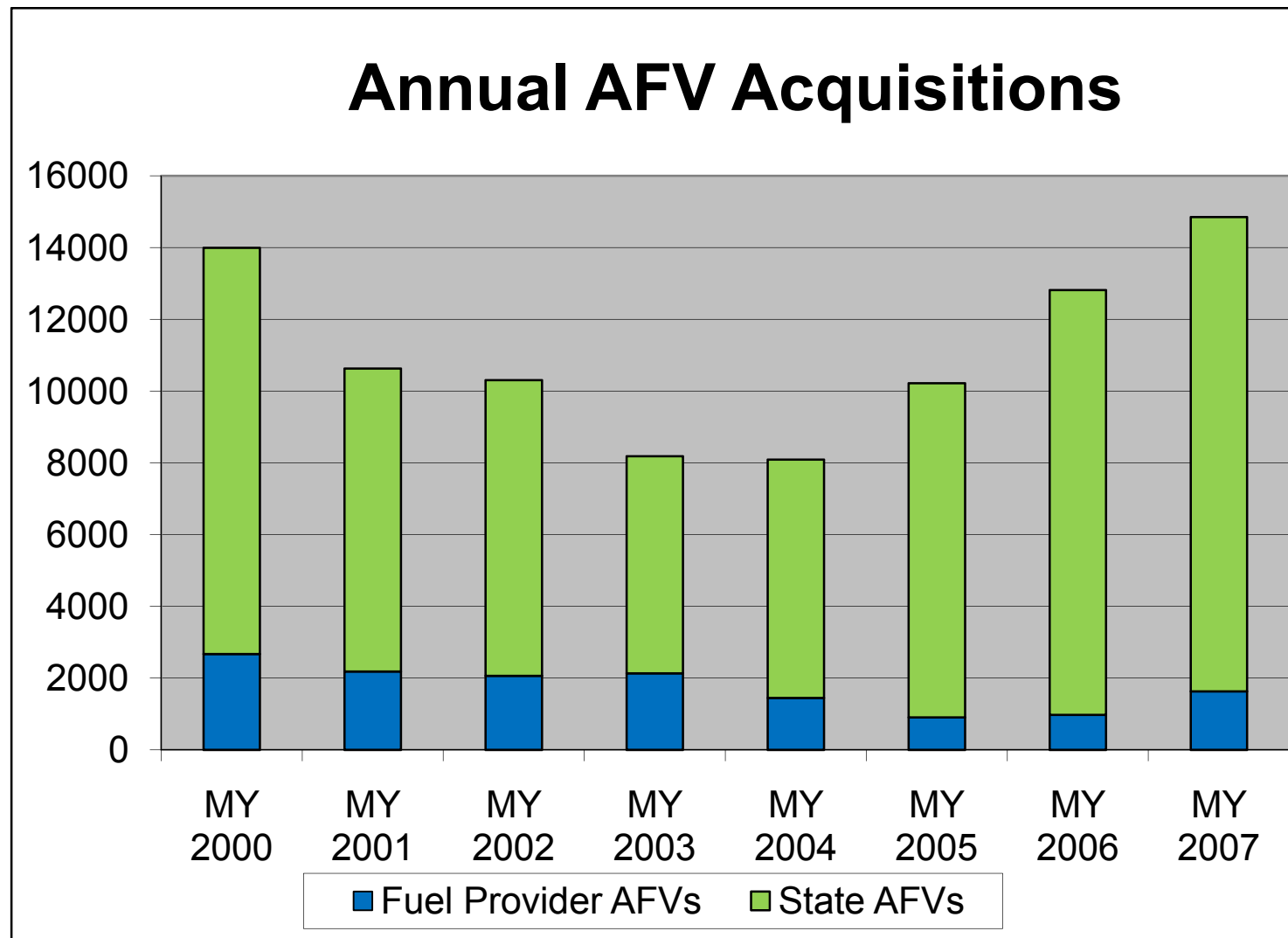
NREL/PR-540-44135

Energy Policy Act Fleet Programs

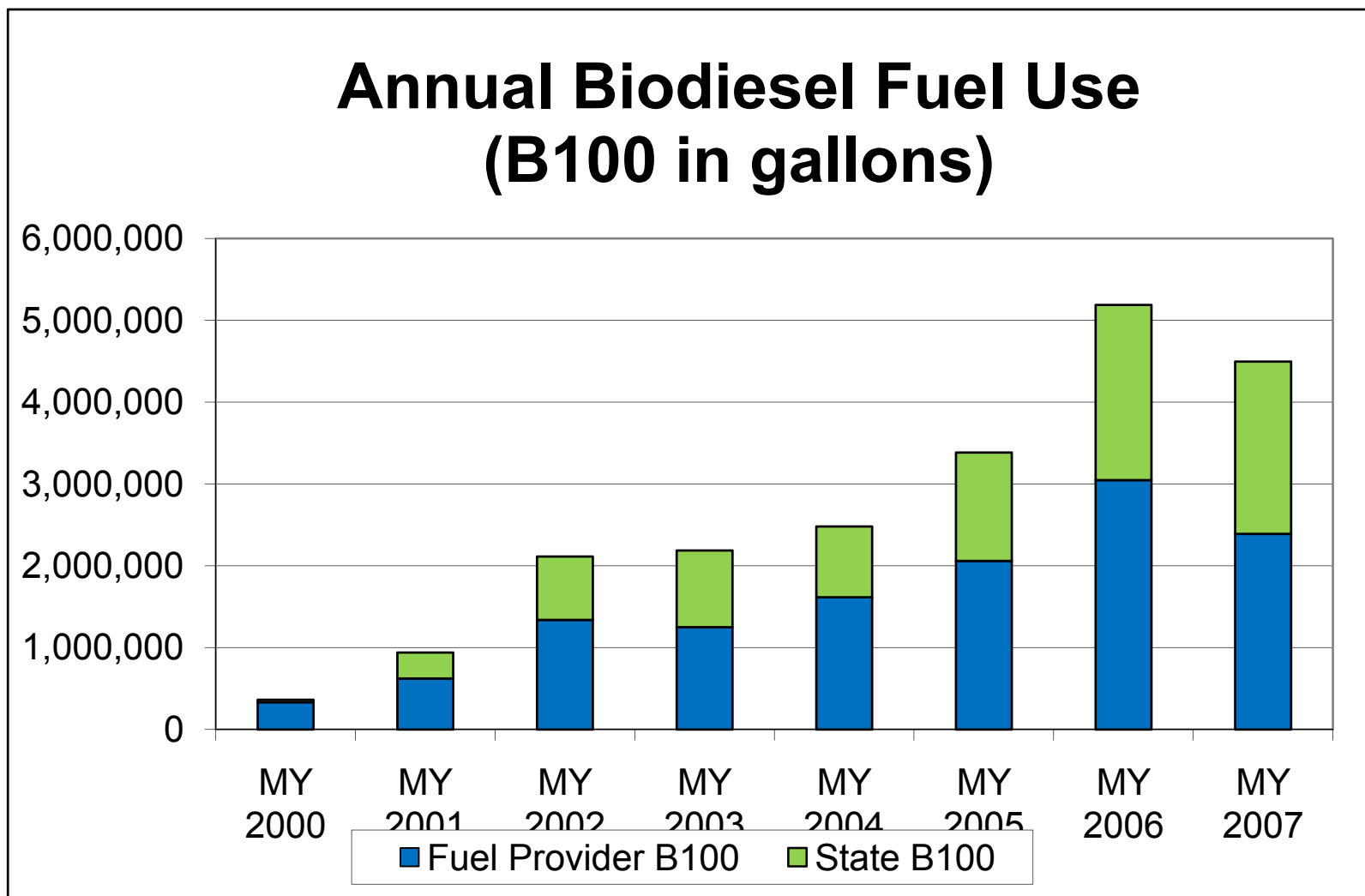
Energy Policy Act of 1992 (EPAAct)

- Standard Compliance
 - Alternative Fuel Vehicle (AFV) acquisitions
 - 75% of covered light-duty vehicle (LDV) acquisitions
 - Biodiesel Credits
- Excellent Compliance Rates

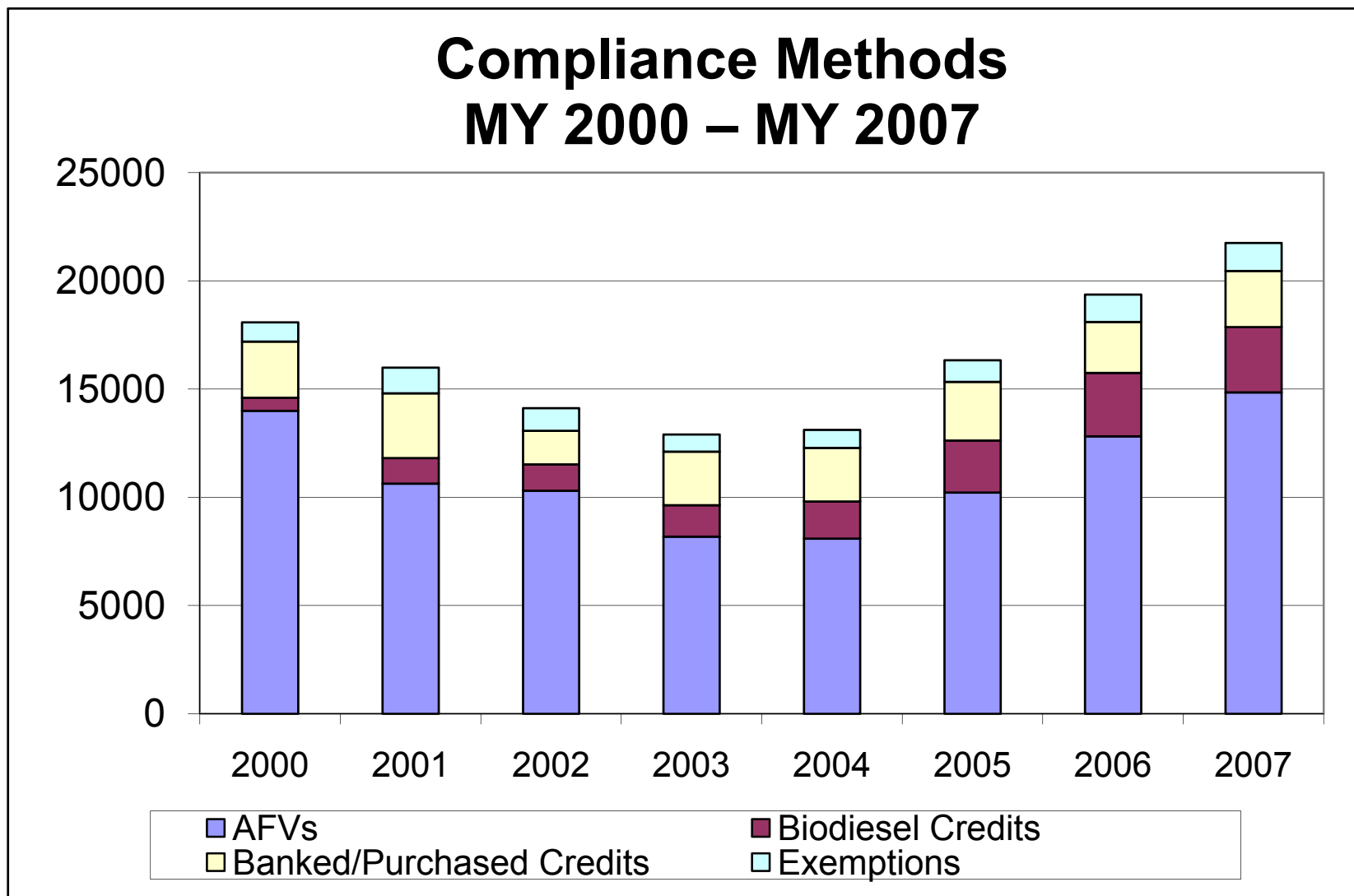
Annual AFV Acquisitions



Annual Biodiesel Fuel Use



Compliance Methods



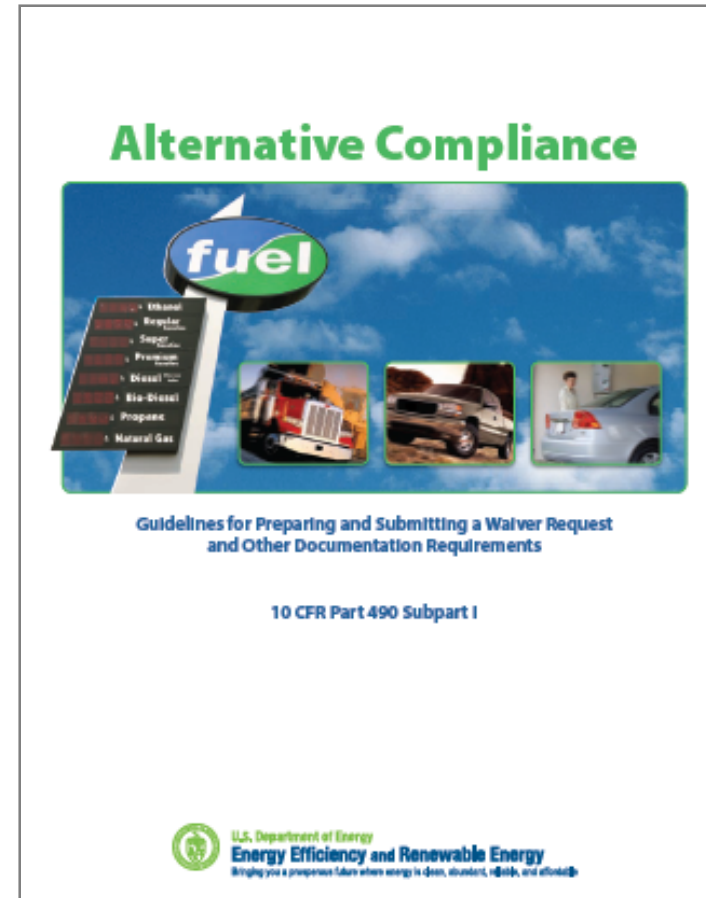
Alternative Compliance Overview

EPAAct 2005

- Option for state and alternative fuel provider fleets covered under the U.S. Department of Energy's (DOE) Alternative Fuel Transportation Program (10 CFR Pt 490)
- Petroleum reduction in lieu of acquiring AFVs and/or credits under the Standard Compliance requirements
- Interested fleets must file with DOE intent to apply for a waiver, and waiver application

Interested?

**How many State
Fleets
have considered
waiving into
Alternative
Compliance?**



Standard vs. Alternative Compliance

Standard Compliance (SC)

- AFV acquisition requirements placed on state fleets

Alternative Compliance (AC)

- Offers covered fleets option to implement petroleum use reduction measures in lieu of AFV acquisitions

Standard vs. Alternative Compliance

Technology	Standard Compliance (AFV Acquisitions)	Alternative Compliance (Petroleum Reduction)
Hybrid electric vehicles (or other energy-efficient conventional fuel technologies)	No AFV credit given	Petroleum reduction from hybrids or other fuel-efficient conventional vehicle technologies counts toward petroleum reduction in model year efficiencies occur
Medium- and heavy-duty AFVs	Credit given only after requirement is met with LDVs	Credit granted for alternative fuel use on GGE basis
Light-duty AFVs	One credit per AFV given	Credit granted for alternative fuel use on GGE basis

Standard vs. Alternative Compliance

Technology	Standard Compliance (AFV Acquisitions)	Alternative Compliance (Petroleum Reduction)
Biodiesel blends	One credit given for every 450 gallons of pure (B100) biodiesel purchased for use in blends of B20 or higher; capped at 50% of annual requirements; credit only for portion greater than that required by any applicable law	Can count biodiesel used in any blend percentage on a GGE basis if it exceeds the amount already prescribed by state and federal law; no cap on amount that can be used to meet requirements
Vehicle miles traveled (VMT) reduction	No credit given	Can count toward petroleum reduction in the model year VMT is reduced
Idle reduction	No credit given	Counts toward petroleum reduction
Truck stop electrification	No credit given	For covered fleet only; no credit given for third party use

Standard vs. Alternative Compliance

Consideration	Standard Compliance (AFV Acquisitions)	Alternative Compliance (Petroleum Reduction)
Non-road vehicles	Not allowed	<p>Fleets may count up to 25% of petroleum reduced from non-road vehicles if:</p> <ul style="list-style-type: none">•They show in their annual petroleum reduction plans that acquisition of non-road vehicles will directly lead to the establishment or upgrade of alternative refueling or recharging infrastructure during an alternative compliance waiver year <p><i>and</i></p> <ul style="list-style-type: none">•Such refueling infrastructure allows for increased petroleum replacement by serving the fleet’s on-road LDVs

Standard vs. Alternative Compliance

Consideration	Standard Compliance (AFV Acquisitions)	Alternative Compliance (Petroleum Reduction)
Exemptions	<p>Given only if warranted on a case-by-case basis. Exemptions will be considered only if:</p> <ul style="list-style-type: none">•Alternative fuel or AFVs are unavailable in the fleet’s area <p><i>or</i></p> <ul style="list-style-type: none">•The additional costs of using AFVs pose an unreasonable financial hardship on the fleet <p>Exemptions are good for only one year</p>	<p>Because alternative compliance offers a wide variety of technologies and methods to satisfy fleet petroleum reduction requirements, they are not allowed</p>

Why Consider Alternative Compliance?

- More flexibility in complying with regulatory requirements
- Use a variety of vehicles that AC does cover
- Want credit for fleet management practices and/or technologies already implemented in your fleet
 - Vehicle miles traveled (VMT) reductions
 - Alternative fuel use
 - Idle reduction
 - Biodiesel use (e.g., in blends lower than B20)
 - Hybrid electric vehicle (HEV) acquisitions
- Coordinating with existing local Clean Cities coalition activities

Why Consider Alternative Compliance?

If you're seriously interested in ...

- Deploying fuel-efficient technologies, such as hybrid vehicles
- Using alternative fuel
- Increasing the use of biodiesel without any limitations on credit availability
- Complying despite geographic limitations or air quality requirements that limit access to AFVs and/or refueling infrastructure
- Receiving credits for alternative fuel use in medium- and heavy-duty vehicles
- Receiving credit for complying with state or other requirements or calling for petroleum use reductions
- Any combination of the above considerations

Alternative Compliance Participation

MY 2008

- 25 filed Intent to Apply for Waiver
- 9 submitted waiver application (3 state entities)
- 9 approved

MY 2009

- 27 filed Intent to Apply for Waiver
- 13 submitted waiver application (3 state entities)
- *All* completed waiver applications approved

Alternative Compliance Participation Steps

- **Intent to Apply for a Waiver**
 - Due March 31 before the model year for which an Alternative Compliance waiver is sought
- **Waiver Application**
 - Due July 31 before the model year for which an Alternative Compliance waiver is sought
- **Annual Report**
 - Due December 31 following the Alternative Compliance waiver year

How to File an Intent to Apply for a Waiver

There is only one way to submit an intent to apply for a waiver.

Submit online at:

www.eere.energy.gov/vehiclesandfuels/epact/state/acp_tool/waiver_app0.cgi

Information required includes:

- Company name
- Address
- Fleet ID number
- Name and title of responsible official
- Model year of the request

Waiver Application Procedure

Waiver Application

- Due no later than July 31 preceding the model year
- Applicable to the entire fleet for the full model year

Must include:

- Framework Information
 - ✓ Alternative compliance vehicle (ACV) inventory
- Petroleum Reduction Plan
 - ✓ A calculated petroleum reduction requirement for the alternative compliance model year
 - ✓ Strategies for reducing petroleum consumption
- Clean Air Act (CAA) Certification of compliance with all applicable CAA vehicle emission standards

What Is an ACV Inventory?

Three components:

1. AFVs acquired in previous model years for compliance (minus retirements and any AFVs for surplus credit (beyond compliance))
2. AFVs planned to be acquired in the subject waiver model year
3. AFVs required to be acquired in previous waiver model years

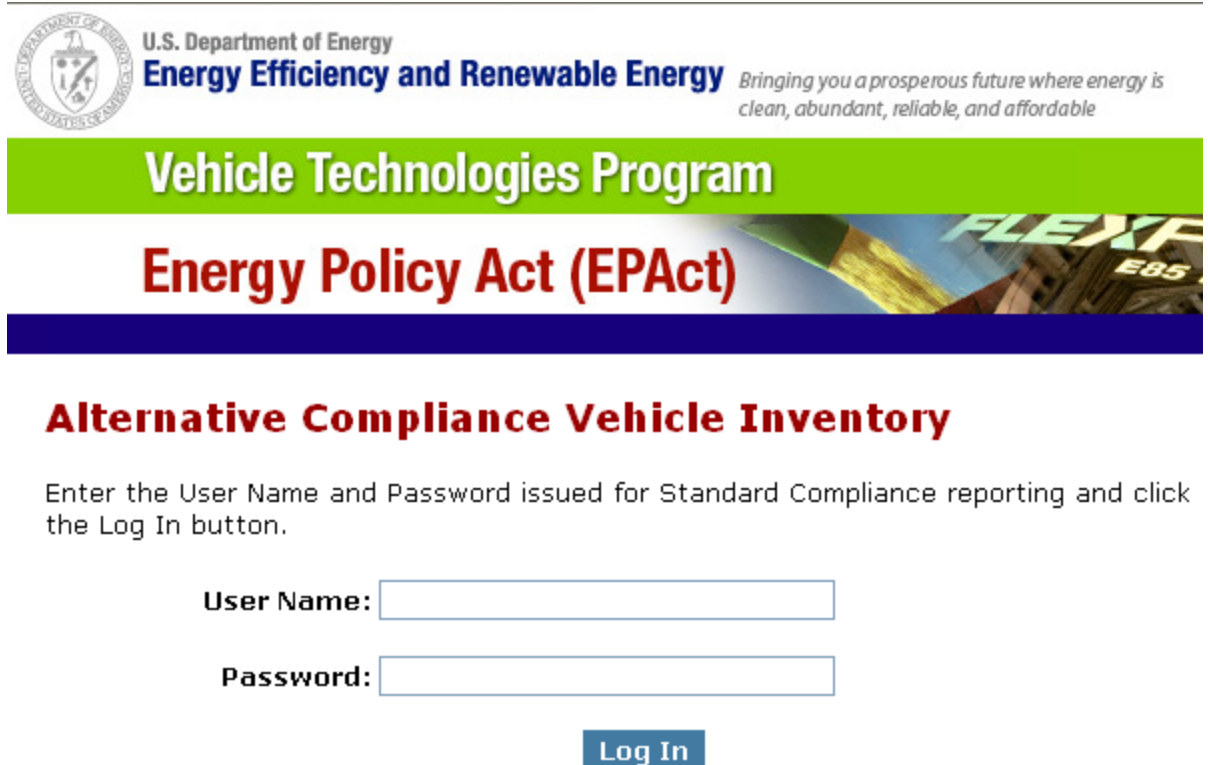
Requires updating fleet's ACV inventory before the beginning of the subject waiver model year

How Do I Update My Fleet's ACV Inventory?

Update your ACV inventory online

www.eere.energy.gov/vehiclesandfuels/epact/state/acp_tool/view_acv.cgi

Online tool tracks fleet's current and retired ACVs to ensure vehicle counts are accurate.



The screenshot shows the login interface for the Alternative Compliance Vehicle Inventory tool. At the top, the U.S. Department of Energy logo is on the left, and the text "U.S. Department of Energy Energy Efficiency and Renewable Energy" is in the center, with the tagline "Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable" on the right. Below this is a green banner with "Vehicle Technologies Program" and a red banner with "Energy Policy Act (EPAct)". The main title "Alternative Compliance Vehicle Inventory" is in red. Below the title, instructions state: "Enter the User Name and Password issued for Standard Compliance reporting and click the Log In button." There are two input fields: "User Name:" and "Password:". A blue "Log In" button is at the bottom right.

U.S. Department of Energy
Energy Efficiency and Renewable Energy *Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable*

Vehicle Technologies Program

Energy Policy Act (EPAct)

Alternative Compliance Vehicle Inventory

Enter the User Name and Password issued for Standard Compliance reporting and click the Log In button.

User Name:

Password:

Log In

Calculating Petroleum Reduction Requirements

- Determine the total number of vehicles in your ACV inventory
- Determine the average LDV fuel use
 - For average LDV fuel-use data, DOE will accept
 - Fuel-use data collected from covered LDVs
 - Fuel-use data extrapolated using actual mileage data and published fuel economy values
 - General fleet or industry statistics

Requirement =

$[(\# \text{ in ACV inventory}) \times (\text{avg. fuel use per covered LDV (GGE)})]$

Alternative Compliance Planning Tool

DOE developed the Alternative Compliance Planning Tool

Assists fleets in calculating petroleum use reduction requirement and developing plans to achieve the requirement

www.eere.energy.gov/vehiclesandfuels/epact/state/acp_tool

The screenshot shows the homepage of the Alternative Compliance Planning Tool. At the top, there is a header for the U.S. Department of Energy, Energy Efficiency and Renewable Energy, with a tagline: "Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable". A green banner reads "Vehicle Technologies Program". Below this, a red banner reads "Energy Policy Act (EPAct)". A navigation bar includes a "Help" link. The main content area is titled "Alternative Compliance Planning Tool" and contains a paragraph explaining the tool's purpose: "Alternative Compliance allows state and alternative fuel provider fleets to reduce petroleum consumption in lieu meeting the alternative fuel vehicle acquisition requirements of 10 CFR Part 490. This tool helps fleets determine their petroleum reduction requirement and create a plan for meeting it. Users can choose from the following methods to meet their requirement." Below this paragraph is a list of methods: Alternative Fuels, Hybrid Electric Vehicles, Fuel Blends, Fuel Economy, Vehicle Miles Traveled Reduction, Truck Stop Electrification, Idling Time Reduction, and Onboard Idle Reduction. A link to "Guidance" is provided. On the right side, there is a login box with the text "To get started, log in using the ID and password issued for Standard Compliance reporting." and fields for "User Name:" and "Password:" with a "Log In" button. Below the login box is a link: "Remind me of my User Name/Password".

U.S. Department of Energy
Energy Efficiency and Renewable Energy *Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable*

EERE Home

Vehicle Technologies Program

Energy Policy Act (EPAct)

◀ Help

Alternative Compliance Planning Tool

Alternative Compliance allows state and alternative fuel provider fleets to reduce petroleum consumption in lieu meeting the alternative fuel vehicle acquisition requirements of 10 CFR Part 490. This tool helps fleets determine their petroleum reduction requirement and create a plan for meeting it. Users can choose from the following methods to meet their requirement.

- Alternative Fuels
- Hybrid Electric Vehicles
- Fuel Blends
- Fuel Economy
- Vehicle Miles Traveled Reduction
- Truck Stop Electrification
- Idling Time Reduction
- Onboard Idle Reduction

For more information on Alternative Compliance, read the [Guidance](#).

To get started, log in using the ID and password issued for Standard Compliance reporting.

User Name:

Password:

Log In

[Remind me of my User Name/Password](#)

Alternative Compliance Planning Tool Features

- **Technology Options**

- Alternative Fuels
- Hybrid Electric Vehicles
- Fuel Blends
- Onboard Idle Reduction
- Vehicle Miles Traveled Reduction
- Truck Stop Electrification
- Fuel Economy
- Idling Time Reduction

- **Automated Petroleum Reduction Calculations**

- **Graphical representation of petroleum use reduction requirement and how each technology strategy contributes**



Elements of a Waiver Request

- **Information about the proposing fleet**
- **Model year for which the waiver is requested**
- **Petroleum reduction plan**
 - Petroleum reduction requirement and how it was calculated
 - Details for each intended strategy
 - Petroleum reduction anticipated for each strategy
- **Certification that the fleet meets all applicable Clean Air Act vehicle emission standards**
 - One-page letter or statement
 - Signed by senior official from proposing fleet

Send in Your Waiver Request

Dana O'Hara

Regulatory Manager
U.S. Department of Energy
EE-2G/Forrestal Building
1000 Independence Ave., SW
Washington, DC 20585

DOE Timing on Applications

- Once DOE receives a ***completed*** waiver request, DOE has 45 days to review it
- If DOE determines it needs more information to approve your waiver request, the 45-day review period begins once DOE receives the additional information

Annual Report

- By December 31 following the waiver model year, fleet submits to DOE an Annual Report.
- Annual Report must:
 - Certify the actual amount of petroleum fuel your fleet reduced during the alternative compliance model year
 - Explain how data were collected
 - Be printed on company or office letterhead and signed by a senior official
- If necessary, DOE may request additional documentation (such as purchase orders, receipts, and fuel use records) to supplement the annual report

If Petroleum Reduction Goals Are Not Met...

Previously Earned AFV-Acquisition Credits

- May be allowed where fleet acted in good faith to meet planned petroleum use reduction
- Written request documenting circumstances leading to shortfall to be submitted as part of Annual Report

Exceeding Petroleum Use Reduction Goals

- **Roll Over of Excess Petroleum Reductions**

- Fleets that exceed requirements may roll over excess petroleum use reductions for use toward future shortfalls that occur due to circumstances beyond their control
- In general, DOE will not allow fleets to apply roll-over amounts greater than 25% of their annual petroleum use reduction requirement

- **How to Roll Over Excess Petroleum Reductions?**

- Must make a written request in Annual Report to set aside or bank the excess petroleum use reductions for future use
- To use a portion of this rollover in the future, a written request to DOE is filed with the Annual Report in the shortfall model year

If You Are Not Granted a Waiver...

Appeals

- If denied a waiver, a fleet may appeal to DOE's Office of Hearings and Appeals using procedures set forth in 10 CFR 490.204(h) and 490.308(g)
- Appeals must be filed within 30 days of notification that DOE rejected the waiver request

Maintaining Alternative Compliance Records

- Fleets granted Alternative Compliance waivers must keep three years of documentation to back up claims regarding petroleum reductions
- Records include, but are not limited to, vehicle and fuel purchase receipts, inventory records, and vehicle retirement dates

Resources



EPAAct Web site: Guidance, Intent, Tools, Final Rule, Tutorial

– www1.eere.energy.gov/vehiclesandfuels/epact/state/index.html

Alternative Compliance Docket for Rulemaking

– www1.eere.energy.gov/vehiclesandfuels/epact/state/afc_docket.html

Dana O'Hara

– (202) 586-9171

– dana.o'hara@ee.doe.gov

